

AMENDMENTS TO THE CLAIMS

Please add new claims 44-58.¹

1. (Original) A semiconductor module comprising:

a substrate comprising:

 a base layer having a substantially planar base layer first surface opposing a substantially planar base layer second surface, where said base layer first surface is exposed to atmosphere and where said base layer is electrically conductive;

 an insulator layer having a substantially planar insulator layer first surface opposing a substantially planar insulator layer second surface, where said base layer second surface and said insulator layer first surface are adjacent and contiguous to one another and where said insulator layer is electrically non-conductive; and

 a conductive layer having a substantially planar conductive layer first surface opposing a substantially planar conductive layer second surface, where said insulator layer second surface and said conductive layer first surface are adjacent and contiguous to one another and where said conductive layer is electrically conductive;

 at least one semiconductor adjacent to said conductive layer second surface, where said at least one semiconductor is electrically coupled to said conductive layer; and

 electrical contacts adjacent to said conductive layer second surface, said electrical contacts electrically coupled to said conductive layer.

2. (Original) The semiconductor module of claim 1, wherein said semiconductor and said electrical contacts are disposed at opposing ends of said substrate.

3. (Original) The semiconductor module of claim 1, wherein said semiconductor and said electrical contacts are disposed in substantially the same plane as one another.

4. (Original) The semiconductor module of claim 1, wherein said base layer is substantially thicker than said insulator and conductive layers.

¹ This amendment is made in accordance with the revised format now permitted. See <http://www.uspto.gov/web/offices/pac/dapp/opla/preognotice/revamdtprac.htm>

5. (Original) The semiconductor module of claim 1, wherein a ratio of a thickness of said base layer to said insulator layer is approximately 3.
6. (Original) The semiconductor module of claim 1, wherein a ratio of a thickness of said base layer to said conductive layer is approximately 14.
7. (Original) The semiconductor module of claim 1, wherein said base layer is approximately between 100 and 500 micrometers thick.
8. (Original) The semiconductor module of claim 1, wherein said insulator layer is thicker than said conductive layer.
9. (Original) The semiconductor module of claim 1, wherein said insulator layer is approximately between 25 and 100 micrometers thick.
10. (Original) The semiconductor module of claim 1, wherein said insulator layer is chosen to provide a predetermined electrical impedance.
11. (Original) The semiconductor module of claim 1, wherein said base layer is made from a metal selected from a group consisting of: copper, bronze, stainless steel, and aluminum.
12. (Original) The semiconductor module of claim 1, wherein said insulator layer is made from a material selected from a group consisting of: a polyimide, an epoxy, and teflon.
13. (Original) The semiconductor module of claim 1, wherein said conductive layer is made from a metal selected from a group consisting of: copper, bronze, and gold.
14. (Original) The semiconductor module of claim 1, wherein said conductive layer forms patterned traces.

15-43 (Withdrawn)

Please add new claims 44-58.

44. (New) The semiconductor module of claim 1, wherein said substrate comprises at least two legs joined by a resilient bend.

45. (New) The semiconductor module of claim 44, wherein said bend is configured to compressibly engage with a female connector.

46. (New) The semiconductor module of claim 44, wherein said electrical contacts are located near where said bend and one of said legs join.

47. (New) The semiconductor module of claim 46, further comprising additional electrical contacts located near where said bend and the other one of said legs join.

48. (New) The semiconductor module of claim 47, wherein at least one of said electrical contacts and at least one of said additional electrical contacts are electrically coupled to each other.

49. (New) The semiconductor module of claim 47, wherein said insulator, conductive layer, and base layer are made from a bendable material.

50. (New) The semiconductor module of claim 44, wherein an acute angle is formed at said bend between said legs.

51. (New) The semiconductor module of claim 44, wherein said legs are substantially parallel to one another.

52. (New) The semiconductor module of claim 44, wherein one of said legs is substantially shorter than the other of said legs.

53. (New) The semiconductor module of claim 44, wherein said substrate has a "j" shape

54. (New) The semiconductor module of claim 44, wherein said substrate has a "u" shape

55. (New) The semiconductor module of claim 44, further comprising an additional semiconductor adjacent and electrically coupled to said conductive layer on opposing sides of each leg, where said semiconductor and said additional semiconductor share common lead lines and electrical contacts.

56. (New) The semiconductor module of claim 44, further comprising multiple legs and bends spanning multiple channels.

57. (New) The semiconductor module of claim 1, wherein said base layer is configured to dissipate heat.

58. (New) The semiconductor module of claim 1, wherein said base layer is configured to discharge electric charge.

CONCLUSION

If there are any fees or credits due in connection with the filing, including any fees required for an Extension of Time under 37 C.F.R. Section 1.136, authorization is given to charge any necessary fees to our Deposit Account No. 16-1150 (order no.9797-0081-999). A copy of this sheet is enclosed for such purpose..

Respectfully submitted,

Date May 27, 2003


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